

TABLES

Table 1. Summary of Direct and Indirect Impacts

Environmental Factors	Alternative				
	Application/Preferred Alternative	Alternative A	Alternative B	Alternative C	Alternative D
Alternative Description	Mining of all known reserves (as of July 2001) including wetlands (prospect and landowner agreement mine plan basis) excluding wetlands withdrawn from current permit consideration as requested by ACOE	No wetland mining, no action (projected statistical mine plan basis)	Mining of all reserves including wetlands (projected statistical mine plan basis)	Mining of all reserves including wetlands excluding DER jurisdictional and deferral wetlands (projected statistical mine plan basis)	Mining of all known reserves (as of November 2000) including wetlands (prospect and landowner agreement mine plan basis)
Project Setting/Existing Conditions	100,580 acre project area. There are approximately 46,000 acres previously disturbed or permitted areas. Avoidance and minimization was completed during the 1987 permitting process and approximately 19,000 acres were preserved from mining in the 1987 original federal and state permitting efforts. SWANCC January 9, 2001 US Supreme Court decision reduced Corps jurisdiction to approximately 1,671 acres within the 18,166 acre application area mining footprint.				
Alternative Details/Description	805 acres DER jurisdiction. 1,671 acres of Corps jurisdiction. Some overlap occurs. The application footprint is approximately 18,166 acres. BOMR and Hamilton County permits for all upland and wetland areas.	No wetlands would be impacted. No new federal permits required. No state jurisdictional wetland permits required. The operational footprint is approximately 2,841 acres. BOMR and Hamilton County permits for all upland areas.	All wetlands with reserves and sufficient mineral interests would be mined or disturbed. Permits required from both federal and state agencies. 1,448 acres DER jurisdiction. 1,858 acres of Corps jurisdiction. The operational footprint is approximately 16,299 acres. BOMR and Hamilton County permits for all upland and wetland areas.	This is the B Alternative minus the "DER" hydrologically connected jurisdictional areas and areas shown as deferral in the pervious EIS. 0 acres DER jurisdiction. Approximately 600 acres of Corps jurisdiction. The operational footprint is approximately 14,005 acres. BOMR and Hamilton County permits for all upland and wetland areas.	Activities under this alternative closely track the current application footprint. 1,448 acres DER jurisdiction. 1,858 acres of Corps jurisdiction. The operational footprint is 20,514 acres. BOMR and Hamilton County permits for all upland and wetland areas.
Wetlands Impacted	A total of 5,670 wetland acres will be mined. Of these acres there are 805 acres of DER jurisdiction and 1,671 acres of ACOE jurisdiction.	0 wetland acres mined.	A total of 5,159 wetland acres will be mined. Of these acres there are 1,448 acres of DER jurisdiction and 1,858 acres of ACOE jurisdiction.	3,648 wetland acres mined.	A total of 6,712 wetland acres will be mined. Of these acres there are 1,448 acres of DER jurisdiction and 1,858 acres of ACOE jurisdiction.
Post-reclamation wetland acreage and change	Slightly greater than acre-for-acre replacement of wetlands in the application area after reclamation is completed.	0 wetland acres reclaimed.	Slightly greater than acre-for-acre replacement of wetlands after reclamation is completed. Overall there will be an increase of approximately 1,178 acres (12%) post-reclamation.	Slightly greater than acre-for-acre replacement of wetlands after reclamation is completed. Overall there will be an increase of approximately 858 acres (9%) post-reclamation.	Slightly greater than acre-for-acre replacement of wetlands after reclamation is completed. Overall there will be an increase of approximately 2,014 acres (20%) post-reclamation.

Environmental Factors	Application/Preferred Alternative	Alternative A	Alternative B	Alternative C	Alternative D
Wildlife	Changes in vegetation and faunal makeup as succession takes place after restoration is complete. Natural biological system values initially increase over time. Construction of lakes in the area will increase the habitat available for waterfowl, wading birds, fish and aquatic mammals.		Changes in vegetation and faunal makeup as succession takes place after restoration is complete. Natural biological system values initially increase over time. Construction of lakes in the area will increase the habitat available for waterfowl, wading birds, fish and aquatic mammals.	Changes in vegetation and faunal makeup as succession takes place after restoration is complete. Natural biological system values initially increase over time. Construction of lakes in the area will increase the habitat available for waterfowl, wading birds, fish and aquatic mammals.	Changes in vegetation and faunal makeup as succession takes place after restoration is complete. Natural biological system values initially increase over time. Construction of lakes in the area will increase the habitat available for waterfowl, wading birds, fish and aquatic mammals.
Groundwater Recharge	No changes are projected between pre-mining and post-reclamation groundwater recharge.		No changes are projected between pre-mining and post-reclamation groundwater recharge.	No changes are projected between pre-mining and post-reclamation groundwater recharge.	No changes are projected between pre-mining and post-reclamation groundwater recharge.
Water Table	Localized lowering of water table may cause the short term drying of some wetlands immediately adjacent to the active mine pits. The water table and drawdown will quickly return to normal as soon as the active mining moves away. See Section 3.1.3.3. (STBD, 2000). The potential amount of unmined areas affected is commensurate with the total amount of mining.				
Uplands Impacted	12,495 upland acres mined.	2,841 upland acres mined.	11,140 upland acres mined.	10,357 upland acres mined.	13,802 upland acres mined.
Post-reclamation upland acreage and change	Overall there will be a decrease of approximately 3,218 acres (12%) post-reclamation. The decrease in upland acreage results in increases in lakes and wetlands.	Overall there will be a decrease of approximately 735 acres (3%) post-reclamation. The decrease in upland acreage results in increases in lakes and wetlands.	Overall there will be a decrease in upland acres of approximately 3,053 acres (12%) post-reclamation. There will be an increase of approximately 265 acres of Hardwood Forest (FLUCCS 434). The decrease in upland acreage results in increases in lakes and wetlands.	Overall there will be a decrease in upland acres of approximately 2,692 acres (10%) post-reclamation. There will be an increase of approximately 260 acres of Hardwood Forest (FLUCCS 434). The decrease in upland acreage results in increases in lakes and wetlands.	Overall there will be a decrease in upland acres of approximately 4,403 acres (17%) post-reclamation. There will be an increase of approximately 2,761 acres of Hardwood Forest (FLUCCS 434). The decrease in upland acreage results in increases in lakes and wetlands.
Wildlife	Changes in vegetation and faunal makeup as succession takes place after mining operations are concluded. Loss of upland habitat, flora and fauna due to conversion of uplands to lakes. See Section 3.1.3.2. (STBD, 2000)				
Lakes Reclaimed	Overall there will be an increase of approximately 2,422 acres post-reclamation.	Overall there will be an increase of approximately 736 acres post-reclamation.	Overall there will be an increase of approximately 1,875 acres post-reclamation.	Overall there will be an increase of approximately 1,834 acres post-reclamation.	Overall there will be an increase of approximately 2,079 acres post-reclamation.

Environmental Factors	Application/Preferred Alternative	Alternative A	Alternative B	Alternative C	Alternative D
Incremental Years of Mining (see section x for rates of mining)*	28 years (reduce by 15 to 18 months due to the decrease in the mining footprint).	3 years	20 years	16 years	22 years
Protected Species	<p>The USFWS has concluded, via a letter from Mr. Pete Benjamin (dated November 19, 2002) that this proposed project will not adversely affect any of the threatened and endangered species addressed in the DSEIS. Specifically Mr. Benjamin stated that the proposed project will not adversely affect the following species: flatwoods salamander (<i>Ambystoma cingulatum</i>), Eastern indigo snake (<i>Drymarchon corais couperi</i>), red-cockaded woodpecker (<i>Picoides borealis</i>), bald eagle (<i>Haliaeetus leucocephalus</i>), wood stork (<i>Mycteria americana</i>), gray bat (<i>Myotis grisescens</i>), Chapman's rhododendron (<i>Rhododendron chapmanii</i>) and Gulf sturgeon (<i>Acipenser oxyrinchus desotoi</i>). In addition, Mr. Benjamin when on to state that PCS:</p> <p>"has sufficiently avoided, minimized, and mitigated for the proposed jurisdictional wetland impacts, and that the sequence of mining and wetland reclamation, Suwannee River tributary diversions and restorations, the proposed conservation easements, and future purchase of environmentally sensitive lands, including wetlands, will adequately offset the proposed wetland impacts."</p>				
Fish and Wildlife Resources	<p>There is a temporary loss of habitat in the areas being mined. Increase in density of wildlife in undisturbed areas with potential increases in predation, disease, etc. Increase in habitat diversity. The project area provides a wide diversity of habitats that serve as strong attractors for migratory wildlife. The combination of natural, active mine areas and various stages of reclaimed area provide large amounts of forage areas and habitats. This has been clearly demonstrated over the past decade by the consistently high hunter success in the PCS Wildlife Management Area operated by the FWCC. This area is actually in an active mine area within the PCS project areas. The FWCC also operates two wildlife management areas (Eagle Lake Fish Management Area and Lang Lake Fish Management Area) within the project area on previously mined areas. A successful commercial hunting and fishing operation also operates on a mosaic of ~14,500 acres of natural, previously mined and reclaimed areas. A private entity recently purchased nearly 3,000 acres of reclaimed wetlands, lakes and uplands for use as a retreat and recreational area.</p>				
Essential Fish Habitat	Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Water Quality	<p>PCS and its predecessors have operated the HCM facility since 1965. The quality of the discharges from the mining operations have steadily improved over that period. All mine water discharges occur through permitted outfalls (NPDES/IW). The discharges meet all applicable permit limits which are designed to insure compliance with applicable state and federal water quality standards. Regardless of the action taken by the ACOE on the proposed activities, the mining discharges will continue and the quality will not change due to the alternatives selected, even if it is the "no action" alternative. Therefore, there are no differences among the alternatives, except for the potential duration given the various mining periods for each alternative.</p>				
Hydrology	<p>Drainage basin boundaries changed during mining operations. During mining runoff captured and routed to permitted discharge points. Hydrologic modeling shows post-reclamation flooding reduced due to increased lake storage. Post-reclamation drainage basins are restored to approximate pre-mining area. Post-reclamation surface water hydrology is restored to approximate pre-mining conditions.</p>				
Recreation	<p>Hamilton County is bounded on three sides by rivers, which are the foundation for resource-based recreational opportunities in the county(STBD, Section 3.2.2.). The Suwannee River runs eighty miles on the east and south, and the Withlacoochee River is the twenty-five mile western boundary. The public lands of the Suwannee River are primitive natural unimproved areas open to the public for recreation activities such as fishing, hunting, hiking, biking, horseback riding, nature study and canoe camping. The recreational and natural resource activities of the Suwannee River were analyzed using the ACOE Recreation and Natural Resource Assessment Criteria (ACOE, 1978) (TBD, Section 3.10). General recreation of the Suwannee River was evaluated to be moderate, primarily due to access, unstable water levels, and shoals. There will be positive impacts on recreation due to the increase in lakes. The increase in mixed upland forest (FLUCCS 434) around the lakes will provide wildlife habitat and hunting opportunities. Recreational opportunities on the Suwannee River will not be affected. There should be no significant differences except for the differences in acres of lakes.</p>				
Aesthetics	<p>Large-scale forest management activities, ongoing mining and reclamation, past logging, fires, and drainage activities have altered the natural flora and fauna of the ecological systems in the project area. Once mining and reclamation are complete, the aesthetics of the project area will improve. Reclamation will create more diverse habitat through the creation of a mosaic landscape which will include lakes, wetlands, hardwood forests, etc. Creating this mosaic attracts various wildlife such as wading birds, and waterfowl, which would not be present otherwise.</p>				

Environmental Factors	Application/Preferred Alternative	Alternative A	Alternative B	Alternative C	Alternative D
Navigation	Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Shoreline Erosion	Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Statewide Cumulative Economic Impacts	\$15,184,943,000 expenditures and 160,066 person years of employment reduced by 15 to 18 months due to the decrease in the application footprint of approximately 1,000 acres.	\$1,626,958,000 expenditures and 17,150 person years of employment	\$10,846,388,000 expenditures and 114,333 person years of employment	\$8,677,110,000 expenditures and 91,466 person years of employment	\$11,931,027,000 expenditures and 125,766 person years of employment
Historic Properties	No impacts.	No impacts.	No impacts.	No impacts.	No impacts.
Energy Requirements and Conservation	This aspect was not quantified. However, the least energy per unit of phosphate recovered will occur under the application alternative. The no action and the more restrictive alternatives prevent the equipment from being utilized efficiently. Avoiding wetlands and mining in smaller disjunct blocks will increase energy consumption.				
Hard Ground	Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Aquatic Communities	There will be no loss of streambed habitat, all losses will be replaced.				
Air Quality	No air quality permits are required for mining operations. The potential air pollutant emissions from phosphate rock mining are limited to fugitive particulate matter contributed by clearing, mining, transport of material, and reclamation activities. The air quality monitoring data collected in the vicinity of both the Swift Creek and the Suwannee River and PCS manufacturing facilities show that total suspended particulate matter levels are below standards established by EPA and adopted by FDER (TBD Section 3.5). quantities of carbon monoxide, nitrogen oxides, volatile organic compounds, and sulfur dioxide, resulting from the exhaust of mobile equipment, are negligible. There have been no significant changes in the mining methods since the TBD. Therefore there is no reason to believe the air quality situation or impacts have changed.				
Noise	In the absence of stationary operational plants and mobile, off-road earth-moving equipment, the baseline day/night average noise level was established to be 40dB (DEIS, 1985). Noise levels for major mobile equipment, including the large draglines, which may also be considered as point sources, are 76-85 dBA at 100 ft distance. These impacts are of short duration and localized. Based on noise source data and the noise attenuation rate, the range of existing noise levels more than one mile from principal noise sources is 40-55 dB, just slightly greater than baseline levels (TBD, Section 3.6). There have been no significant changes in the mining methods since the TBD. Therefore there is no reason to believe the noise situation or impacts have changed.				
Radiation	The mining process does not produce radioactive waste. However, radon emission may increase slightly on mined and reclaimed lands. This has been extensively studied for several years. The increase is not related to community type since, the increase occurs whether wetlands or uplands are mined. There are no risks to humans or wildlife as long as the state guidelines are followed.				
Acres of Clay Settling Areas Required	3,393 acres for the application footprint.	0 acres for the alternative footprint.	2,870 acres for the alternative footprint.	2,870 acres for the alternative footprint.	2,893 acres for the alternative footprint.

* The estimated years of mine life were based upon continuous operations at a consistent production rate until all the reserves are mined. Experience has demonstrated that production levels and mining rates vary widely over time. The estimated years of mine life are valid for comparison of alternatives, but should not be viewed as a limitation on the duration of permitted operations. All alternatives evaluated are incremental to the currently permitted operations.

Table 2. Percent Relative Dominance Summary of Wetland Data Collected at PCS. (revised 01/07/03)

	Wetland #										Average	
	2696 ^A	1175 ^A	2275 ^A	2734 ^B	1370 ^B	1227 ^B	1378 ^B	1690 ^B	2139 ^B	2550 ^B	620	630/615
<u>Taxa</u>												
<i>CANOPY</i>												
Nyssa biflora	16.52	4.17	28.57	50.00	43.75	38.71	44.31	45.10	82.52	37.90	16	61
Taxodium ascendens	69.57	95.83	71.43	40.00	37.50	54.03	44.31	18.95	4.85	14.23	79	89
Magnolia virginiana				7.50				9.15	5.83	21.89		11
Pinus elliotii	13.91			2.50	18.75	7.26	2.40	10.46	0.97	0.18	14	16
Acer rubrum									4.85	21.17		13
Gordonia lasianthus							8.38	9.15		3.38		7
Persea borbonia							0.60	7.19	0.97	0.71		2
Lyonia lucida										0.18		0
Ilex opaca										0.18		0
Ilex sp.										0.18		0
<i>SUBCANOPY</i>												
Lyonia lucida	30.95	29.17	53.85	13.33		19.35	35.93	43.84	36.27	1.96	38	53
Clethra alnifolia	5.50	12.50	3.85	16.67		4.84	6.59	4.11	15.69	11.61	7	15
Nyssa biflora	18.25	8.33	38.46	41.67	68.75	52.42	49.10	33.56	33.33	30.18	22	60
Taxodium ascendens	34.12	4.17	3.85	8.33	12.50	15.32	6.59	5.48	1.96	4.11	14	18
Pinus elliotii	4.76				6.25					0.18	5	7
Persea borbonia	3.17									1.25	3	4
Myrica cerifera	3.17	33.33				4.84	0.60		0.98	0.71	18	15
Magnolia virginiana					6.25	1.61		6.85	9.8	7.41		6
Acer rubrum					6.25			1.37		40.54		16
Gordonia lasianthus							1.20	4.11		1.79		2
Ilex sp.										0.36		0
Cephalanthus occidentalis		8.33				1.61		0.68	1.96		8	8
Ilex virginiana		4.17									4	
Saururus cernuus										0.18		0

^A Based on reference wetland data and descriptions in the Florida Land Use, Cover and Forms Classification System (FLUCCS), code 620 Wetland Coniferous Forest.

^B Based on reference wetland data and descriptions in the Florida Land Use, Cover and Forms Classification System (FLUCCS), code 630/615 Wetland Forested Mixed/Stream and Lake Swamps (Bottomland).

Table 3. Reference Wetland Composition. (revised 01/07/03)

Tree Groups	Percentage	FLUCCS Code	Acres
Nyssa	30	630/615	958
Taxodium spp.	35	630/615	
bays	15	630/615	
pinos	5	630/615	
misc. hardwoods	15	630/615	
Taxodium spp.	60	620	230
pinos	20	620	
misc. hardwoods	20	620	

Table 4. Summary of Disturbance within Pre-mining Drainage Basins - Hamilton County Mine.

PERCENT OF BASIN ISOLATED FROM BASE FLOW																				
Year	Bell Creek	Bull Bay	Camp Branch	Cat Creek	Cone Bridge	East Hamilton	Four Mile Branch	Godwin Bridge	Hunter Creek	Jerry Branch	Long Branch	Ratliff Creek	Roaring Creek	Rocky Ck. Shaky pd	Sal Marie Branch	Sugar Creek	Suwannee River	Swift Creek	Top Bay	White Springs
Pre Mining Acres	4051.79	1474.82	(1) 5548.85	309.73	1894.23	1084.69	2659.96	398.64	(1) 16613.94	2222.77	3922.09	1004.46	11810.82	30014.93	1809.92	2993.14	3645.46	(1) 24677.75	171.99	305.46
2001	11%	5%		30%	0%	0%	19%	0%		0%	4%	0%	43%	10%	34%	21%	0%		23%	0%
2002	21%	5%		58%	0%	0%	19%	0%		0%	4%	0%	43%	11%	62%	32%	0%		23%	0%
2003	21%	5%		58%	0%	0%	19%	0%		0%	4%	0%	47%	11%	62%	32%	0%		23%	0%
2004	21%	5%		58%	0%	0%	19%	0%		0%	4%	0%	47%	11%	62%	32%	0%		23%	0%
2005	21%	8%		58%	0%	0%	30%	0%		0%	4%	0%	47%	11%	62%	32%	0%		23%	0%
2006	21%	8%		58%	0%	0%	30%	0%		0%	4%	0%	47%	11%	62%	32%	0%		23%	0%
2007	21%	8%		58%	0%	0%	30%	0%		0%	19%	0%	50%	11%	62%	0%	0%		23%	0%
2008	21%	8%		0%	0%	0%	30%	0%		0%	19%	0%	50%	0%	62%	0%	0%		23%	0%
2009	0%	8%		0%	0%	0%	36%	0%		15%	19%	0%	50%	0%	62%	0%	1%		23%	0%
2010	0%	8%		0%	0%	0%	36%	0%		15%	19%	0%	50%	0%	62%	0%	1%		23%	0%
2011	15%	0%		0%	48%	0%	6%	0%		34%	34%	0%	50%	0%	62%	0%	1%		0%	0%
2012	15%	0%		0%	48%	0%	6%	0%		34%	34%	0%	50%	5%	0%	0%	1%		0%	0%
2013	15%	0%		0%	48%	0%	6%	0%		34%	34%	0%	50%	5%	0%	11%	6%		0%	0%
2014	15%	0%		0%	48%	0%	6%	0%		34%	34%	0%	46%	5%	0%	11%	6%		0%	0%
2015	18%	0%		0%	48%	65%	6%	0%		34%	34%	0%	48%	5%	0%	11%	6%		0%	0%
2016	18%	0%		0%	48%	65%	6%	0%		34%	34%	0%	48%	5%	0%	11%	6%		0%	0%
2017	18%	0%		0%	48%	65%	0%	0%		19%	34%	0%	54%	5%	0%	37%	6%		0%	0%
2018	32%	0%		0%	48%	65%	0%	0%		19%	38%	21%	54%	9%	0%	37%	6%		0%	0%
2019	17%	0%		0%	48%	65%	0%	0%		19%	23%	21%	31%	9%	0%	37%	6%		0%	0%
2020	17%	0%		0%	48%	65%	0%	0%		19%	4%	21%	31%	9%	0%	37%	6%		0%	0%
2021	17%	0%		0%	0%	65%	0%	0%		19%	4%	21%	31%	9%	0%	37%	5%		0%	0%
2022	17%	0%		0%	0%	65%	0%	0%		0%	17%	21%	31%	9%	0%	37%	5%		0%	0%
2023	17%	0%		0%	0%	65%	0%	0%		0%	17%	21%	31%	6%	0%	37%	5%		0%	0%
2024	10%	0%		0%	0%	65%	0%	57%		0%	17%	21%	29%	6%	0%	26%	0%		0%	0%
2025	10%	0%		0%	0%	65%	0%	57%		0%	31%	21%	29%	10%	0%	0%	0%		0%	0%
2026	10%	0%		0%	0%	0%	0%	57%		0%	31%	0%	29%	10%	0%	0%	0%		0%	0%
2027	10%	0%		0%	0%	0%	0%	57%		0%	31%	0%	29%	10%	0%	0%	0%		0%	0%
2028	10%	0%		0%	0%	0%	0%	57%		0%	18%	0%	29%	9%	0%	0%	0%		0%	0%
2029	7%	0%		0%	0%	0%	0%	57%		0%	18%	0%	29%	9%	0%	0%	0%		0%	0%
2030	7%	0%		0%	0%	0%	0%	57%		0%	18%	0%	29%	10%	0%	0%	0%		0%	0%
2031	7%	0%		0%	0%	0%	0%	0%		0%	1%	0%	42%	10%	0%	0%	0%		0%	0%
2032	7%	0%		0%	0%	0%	0%	0%		0%	1%	0%	42%	6%	0%	0%	0%		0%	0%
2033	7%	0%		0%	0%	0%	0%	0%		0%	1%	0%	42%	4%	0%	0%	0%		0%	0%
2034	7%	0%		0%	0%	0%	0%	0%		0%	1%	0%	42%	4%	0%	0%	0%		0%	0%
2035	7%	0%		0%	0%	0%	0%	0%		0%	1%	0%	42%	4%	0%	0%	0%		0%	0%
2036	7%	0%		0%	0%	0%	0%	0%		0%	1%	0%	42%	1%	0%	0%	0%		0%	0%
2037	7%	0%		0%	0%	0%	0%	0%		0%	1%	0%	37%	0%	0%	0%	0%		0%	0%
2038	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	29%	0%	0%	0%	0%		0%	0%
2039	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	20%	0%	0%	0%	0%		0%	0%
2040	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	20%	0%	0%	0%	0%		0%	0%
2041	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%	0%	0%	0%		0%	0%
2042	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%	0%	0%	0%		0%	0%

(1) THESE BASINS CONTAIN NPDES DISCHARGE POINT. AS A RESULT, ALL FLOW FOR THAT BASIN IS ROUTED TO THE DISCHARGE POINT AND THERE IS NO ISOLATION OF AREA.

Table 5. Comparison of Evaluation Area Affected Environment and Post-reclamation Landuse by Alternative.

FLUCCS	Description	AFFECTED	ALT A	ALT B	ALT C	ALT D	Application Footprint/ Preferred Alternative
		ENVIRONMENT	ONSITE	ONSITE	ONSITE	OnSITE	
		EVALUATION	EVALUATION	EVALUATION	EVALUATION	EVALUATION	
		AREA	AREA	AREA	AREA	AREA	
110	Residential	271	242	170	180	171	219
200/400	Agriculture/Forestry	0	0	2,565	2,565	1,341	1,538
212	Unimproved Pastures	1,997	1,660	1,551	1,554	1,117	1,385
215	Field Crops	1,149	950	638	668	725	852
232	Poultry Feeding Operations	50	50	-	-	0	3
254	Aquiculture	81	81	81	81	77	81
411	Pine Flatwoods	2,154	1,845	513	567	263	337
434	Hardwood - Conifer Mixed	1,463	2,021	2,092	2,101	4,484	3,307
441	Coniferous Plantations	18,710	18,294	15,231	15,485	13,322	14,657
520	Lakes	5	741	1,896	1,856	2,101	2,326
611	Bay Swamps	620	620	607	607	203	615
615	Stream & Lake Swamps (Bottomland)	367	367	364	389	239	344
617	Mixed Wetland Hardwoods	284	284	255	254	176	205
618	Willow & Elderberry	-	-	471	471	1,551	1,341
620	Wetland Coniferous Forests	5,415	5,415	3,388	3,549	3,025	3,371
630	Wetland Forested Mixed	3,216	3,216	6,053	5,548	6,808	4,895
640	Vegetated Non-Forested Wetlands	114	114	57	57	28	120
742	Borrow Areas	28	28	10	10	10	16
812	Railroads	11	11	11	11	11	11
814	Roads & Highways	102	101	85	85	75	125
TOTAL		36,038	36,038	36,038	36,038	35,727	35,747

wetlands ¹		10,016	10,016	11,194	10,874	12,030	10,890
uplands ²		25,605	24,900	22,671	23,021	21,329	22,159
water ³		32	768	1,907	1,866	2,112	2,342
urban ⁴		384	354	266	276	257	355

wetlands ¹		10,016	10,016	11,194	10,874	12,030	10,890
uplands ⁵		25,989	25,254	22,937	23,298	21,586	22,515
water ³		32	768	1,907	1,866	2,112	2,342

Note ¹ wetlands = sum of 611, 615, 617, 618, 620, 630, and 640.

Note ² uplands = sum of 200/400, 212, 215, 232, 254, 411, 434, and 441.

Note ³ water = sum of 510 and 520 + 742

Note ⁴ urban = sum of 110, 140, and 150 + 812 and 814.

Note ⁵ uplands = sum of uplands and urban.

Table 6. Comparison of Project Area Affected Environment and Post-reclamation Landuse by Alternative.

		AFFECTED ENVIRONMENT PROJECT AREA	ALT A ONSITE PROJECT AREA	ALT B ONSITE PROJECT AREA	ALT C ONSITE PROJECT AREA	ALT D ONSITE PROJECT AREA	Application Footprint/ Preferred Alternative
FLUCCS	Description						
110	Residential	271	242	170	180	180	219
140	Commercial and Services	1	1	1	1	1	1
150	Industrial	2,431	2,431	2,431	2,431	2,431	2,450
200/400	Agriculture/Forestry	4,690	4,690	8,134	8,134	8,134	9,888
212	Unimproved Pastures	5,129	4,785	4,620	4,642	4,642	3,879
215	Field Crops	1,150	950	638	668	668	861
232	Poultry Feeding Operations	67	67	17	17	17	20
254	Aquiculture	81	81	81	81	81	81
411	Pine Flatwoods	5,145	4,835	3,480	3,568	3,568	1,975
434	Hardwood - Conifer Mixed	6,620	7,188	6,885	6,880	6,880	7,946
441	Coniferous Plantations	39,916	39,507	36,512	36,731	36,731	32,670
510	Streams & Waterways	36	36	36	36	36	36
520	Lakes	5,463	6,198	6,977	6,932	6,932	7,134
611	Bay Swamps	1,579	1,579	1,585	1,585	1,585	1,612
615	Stream & Lake Swamps (Bottomland)	1,001	1,001	957	983	983	1,052
617	Mixed Wetland Hardwoods	1,154	1,154	1,124	1,124	1,124	1,075
618	Willow & Elderberry	4,915	4,915	5,426	5,426	5,426	6,647
620	Wetland Coniferous Forests	6,046	6,036	3,926	4,086	4,086	3,903
630	Wetland Forested Mixed	13,354	13,353	16,151	15,646	15,646	17,590
640	Vegetated Non-Forested Wetlands	287	287	216	216	216	283
742	Borrow Areas	28	28	11	11	11	16
812	Railroads	65	65	65	65	65	209
800	Transportation & Utilities	1,150	1,150	1,138	1,138	1,138	1,034
TOTAL		100,580	100,580	100,580	100,580	100,580	100,581

wetlands ¹		28,336	28,325	29,385	29,066	29,066	32,162
uplands ²		62,798	62,104	60,367	60,720	60,720	57,321
water ³		5,527	6,263	7,024	6,979	6,979	7,186
urban ⁴		3,918	3,889	3,805	3,815	3,815	3,913

wetlands ¹		28,336	28,325	29,385	29,066	29,066	32,162
uplands ⁵		66,717	65,993	64,172	64,535	64,535	61,233
water ³		5,527	6,263	7,024	6,979	6,979	7,186

Note ¹ wetlands = sum of 611, 615, 617, 618, 620, 630, and 640.

Note ² uplands = sum of 200/400, 212, 215, 232, 254, 411, 434, and 441.

Note ³ water = sum of 510 and 520 + 742

Note ⁴ urban = sum of 110, 140, and 150 + 812 and 814.

Note ⁵ uplands = sum of uplands and urban.

Table 7. Landuse Types Impacted by Mine/Mine Support by Alternative.

		Alternative A	Alternative B	Alternative C	Alternative D	Application Footprint/ Preferred Alternative
FLUCCS	Description					
110	Residential	29	101	90	100	57
150	Industrial	0	0	0	0	0
200/400	Agriculture/Forestry	0	0	0	0	0
212	Unimproved Pastures	337	381	378	865	632
215	Field Crops	201	513	483	425	300
232	Poultry Feeding Operations	0	50	50	50	50
254	Aquiculture	0	0	0	0	0
411	Pine Flatwoods	310	1,642	1,587	1,723	1809
434	Hardwood - Conifer Mixed	222	501	420	458	473
441	Coniferous Plantations	1,730	7,888	7,290	10,114	9106
520	Lakes	0	0	0	0	0
611	Bay Swamps	0	376	376	515	486
615	Stream & Lake Swamps (Bottomland)	0	230	6	237	253
617	Mixed Wetland Hardwoods	0	116	114	119	100
618	Willow & Elderberry	0	0	0	0	0
620	Wetland Coniferous Forests	0	2,731	2,320	3,553	3241
630	Wetland Forested Mixed	0	1,630	755	2,166	1490
640	Vegetated Non-Forested Wetlands	0	60	60	104	93
742	Borrow Areas	0	17	17	17	11
812	Railroads	0	0	0	0	0
814	Roads & Highways	11	64	58	66	64
TOTAL		2,841	16,299	14,005	20,514	18,166

wetlands ¹		0	5,159	3,648	6,712	5674
uplands ²		2,800	10,975	10,208	13,636	12370
water ³		0	0	0	0	0
urban ⁴		40	165	148	166	122

wetlands ¹		0	5,159	3,648	6,712	5674
uplands ⁵		2,841	11,140	10,357	13,802	12491
water ³		0	0	0	0	0

Note ¹ wetlands = sum of 611, 615, 617, 618, 620, 630, and 640.

Note ² uplands = sum of 200/400, 212, 215, 232, 254, 411, 434, and 441.

Note ³ water = sum of 510 and 520 + 742

Note ⁴ urban = sum of 110, 140, and 150 + 812 and 814.

Note ⁵ uplands = sum of uplands and urban.